

The Aviation Sector from a Work Psychological Perspective: A Bibliometric Analysis of Graduate-Level Theses Written in Türkiye

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Abstract

When aviation studies from past to present are examined, it has been observed that human-oriented studies have increased gradually after it was determined that airplane accidents are caused by human error rather than technical problems. Because work psychology is a discipline that examines the attitudes and behaviors of employees in work life, includes issues related to the improvement of current working conditions and the correction of negative conditions, and will contribute to the minimization of human errors, this research will examine the theses written within the scope of work psychology in the aviation sector by excluding the technical parts in the aviation field. For this purpose, in the National Thesis Center of the Council of Higher Education in Türkiye, between 2003 and 2023, some keywords related to the field were searched and it was determined in which years, on which subjects, where, about whom the research was conducted, and which type of research was used. As a result of the analysis, it has been determined that there has been a great interest in "human"-oriented studies in aviation in Türkiye in the last 20 years, but the number of theses has increased more than in the past after 2019, mostly in Beykent, Anadolu and Gelişim universities and social sciences institutes, and in business and civil aviation management departments, using quantitative research methods. Moreover, "organizational commitment", "stress", "burnout", "communication" and "safety management" subjects were mostly studied at the master's level and "performance", "organizational commitment", "personality", "competence" and "management style" were mostly studied at the doctoral level and the most studied sample group types were employees in the aviation sector generally as well as pilots.

1. Introduction

Airline is more preferred for passenger and cargo transportation as it is faster, more comfortable and safer than other transportation methods (Janic,2000). The development of technology and economy, the increase in international trade with the effect of globalization and the increase in tourism activities have positively affected the travel. These developments have led to the improvement of the aviation sector and the spread of scientific research on this subject. Although there is a lot of research at the national and international level in the field of aviation, "human"-oriented studies are based on a very recent past. The reason for such a tendency is that the technical equipment is stronger with the increase in technological opportunities, so human errors are highlighted as the cause of the plane crashes. The discipline of work psychology, which examines attitudes and behaviors in business life, is used in order to reduce the human errors

or to behave safely beforehand.

In this study, the theses written in the aviation sector with the perspective of work psychology in the national thesis center of the Council of Higher Education in Türkiye between 2003-2023 by scanning the concepts of "aviation", "flight", "cockpit", "pilot", "cabin crew", "air traffic" "aviation safety" were found. They were classified in terms of year of publication, university, institute, department, higher education level, sample group, type of research, and topics studied. The findings were turned into tables with numerical data.

In the first part of the study, the aviation sector was evaluated with a work psychological perspective in general. In the next part, the bibliometric analysis method was used, and the theses were classified by making a general within the framework of the determined concepts in the national thesis center. Finally, the findings were evaluated in the conclusion part.

2. Aviation Sector from a Work Psychological Perspective

People generally use air transport more frequently than other means of transport because it is fast, safe and comfortable. Therefore, the aviation sector, which has developed rapidly since the 20th century, has become a significant position in the transportation sector (Sun, 2019; Taşlıgil, 1997). The sector is also very important for national economic growth and regional development by employment because the fast-growing, capital-intensive, and fragile structure (Tsiotas, Erdem and Çubukçu, 2020). For instance, employment expectation in the global level is to reach approximately 100 million people in 2034 in the aviation sector. Türkiye has some opportunities in terms of civil aviation sector such as being a tourism country, geographical features and location, having a widespread air network throughout the country, having a young workforce potential and these affects national income and employment directly and indirectly (Macit and Macit, 2017). As a matter of fact, according to Civil Aviation Annual Report, while approximately 65.000 employees were employed in the sector in 2003, this number reached 245.876 in 2020 (SHGM, 2021). Around millions of people work in the aviation sector directly and indirectly such as airport operators, flight and cabin crews; executives; ground services, check-in, training, maintenance staff; engineers and designers of civil aircraft, engines and components; air traffic controllers; retail, car rental, customs and immigration, freight forwarders; catering and fuel suppliers; aircraft suppliers, manufacturers of goods sold in airports, and a variety of business support roles like call centers, IT and accountancy (ATAG, 2023).

The aviation sector includes many different occupational groups, as well as there is little to no tolerance for mistakes due to the fact that even the smallest of mistakes could endanger the lives of personnel and passengers. The aviation system is a complex one and it is comprised of dimensions including the human, technological, organizational, and societal interactions (Høyland and Aase, 2009). With the development of technology, the causes of civil and military flight crashes are "human" with a high rate of 70-80%, because while errors caused by technical problems have decreased radically in the last 40 years, human errors have decreased at a lower rate (Wiegmann and Shappell, 2001). Human mistakes can be divided into two types in aviation sector. One of the mistakes that instructions for flight operations are deliberately not adhered to; another is related to the incorrect assessment of situations encountered suddenly during the flight and the decisions taken following the incorrect assessment. Both are very noticeable mistakes (Rezhikov et al., 2016) and such mistakes can be reduced by applying work psychology.

Today, pilots piloting large planes carrying hundreds of people and cabin crew must be evaluated in detail in terms of both the physical and psychological problems. Currently, instead of physical demands, mental and emotional demands have become prominent in work life for many employees (Jonge and Kompier, 1997). As a result, work psychology has come to the fore to understand and predict the reasons for the thoughts, attitudes and behaviors of those working in the aviation sector. As a matter of fact, aviation psychology, which began with personality tests used by psychologists in selecting pilots for military service during the First World War, receives support from work psychology in order to improve the welfare of employees in aviation, reduce human-

induced errors, and improve the performance of employees (Birsnel, 2022; Kümbül Güler, 2015). For the same purpose, Crew Resource Management (CRM) programs has been developed to provide the effective use of all resources, including human, knowledge, conditions, software and hardware inside and outside the plane, to conduct flight safely. Thanks to CRM skills (cognitive and interpersonal) such as problem identification, task prioritization, workload management, teamwork, communication, leadership; potential human errors that cause accidents are reduced (Terzioğlu, 2010).

Moreover, work psychology topics such as employee attitudes and behaviors, relations between employees, cooperation, effective communication, teamwork, work-life balance, motivation, job satisfaction, anxiety, stress, burnout, bullying in the workplace, management and leadership styles, and so on, affect flight safety as they affect employees positively or negatively. In addition, although the rules about flight safety are clear and the senior management is primarily responsible, practical studies such as establishing and disseminating safety awareness in employees, determining risks, taking necessary precautions, as well as determining policies for these issues are within the discipline of work psychology (Birsnel, 2022; Taşçıoğlu, 2018).

3. Analysis of Graduate Theses Written in the Aviation Sector from a Work Psychological Perspective at the Council of Higher Education National Thesis Center between 2003-2023

3.1. Purpose of the research

When the graduate level theses in the aviation sector are examined, it is seen that there are studies in fields such as engineering, medicine, law, international relations, economy, tourism, history, meteorology and so on. However, because it has recently been suggested that human errors are the most common cause of aircraft accidents, the purpose of this study is to examine the graduate level theses written with the perspective of work psychology, which is a discipline that examines the causes of "human errors", how solutions can be found and how to improve employee well-being. This research involves those theses in the National Thesis Center in Türkiye which examine the aviation sector from the perspective of work psychology between 2003 and 2023, with the aim of making classifications by examining them in terms of variables such as the year they were published; the university, institute, and department from which they come; the research methods utilized; the research topics studied, sample group selected, higher education level graduated, and finally, to monitor the changes, transformations, and development of the theses written on these concepts during this process and to guide future studies.

3.2. Research questions

For the purpose of the research, the following research questions were determined, and the studies in the National Thesis Center in Türkiye were classified on the basis of the following questions.

- 1) What is the distribution of theses written from a work psychological perspective in the aviation sector according to the years in which they were published?
- 2) What is the distribution of theses written from a work psychological perspective in the aviation sector according

to the universities at which they were published?

- 3) How is the distribution of theses written from a work psychological perspective in the aviation sector according to the institutes at which they were published?
- 4) What is the distribution of theses written from a work psychological perspective in the aviation sector according to the departments in which they were published?
- 5) What is the distribution of theses written from a work psychological perspective in the aviation sector according to the higher education level (master's, doctoral)?
- 6) What is the distribution of theses written from a work psychological perspective in the aviation sector according to the topics of work psychology examined?
- 7) How is the distribution of theses written from a work psychological perspective in the aviation sector according to the sample group examined?
- 8) What is the distribution of theses written from a work psychological perspective in the aviation sector by research type?

3.3. Methods

In this research, graduate level theses (MA and PhD) written in Türkiye between the years 2003-2023 in the aviation sector from the perspective of work psychology were examined using the bibliometric analysis method. Bibliometric analysis is one of the research methods used when examining the current state, change and development of the literature in a particular field. In the study, the concepts of "aviation", "flight", "cockpit", "pilot", "cabin crew", "air traffic" and "aviation safety" were scanned among the allowed theses in the National Thesis Center of the Council of Higher Education between 2003 and 2023. A scan was made among determined 1250 theses, and then 49 doctoral theses and 195 master's theses written with the perspective of work psychology, a total of 244 graduate theses and 2 medical specialization theses were reached. However, it was seen that some theses intersect in the search, in this case, the same theses were removed in order to avoid repetition and the certain number was reached. When the intersecting theses were sorted out, a total of 236 theses were evaluated over 46 doctorate, 188 master's and 2 medical specialization theses.

3.4. Findings

3.4.1. Distribution of theses written from a work psychological perspective in the aviation sector by year of publication

When the theses written on the aviation sector from the perspective of work psychology in the National Thesis Center between 2003 and 2023 are examined according to the years they were published, it was observed that the year with most studies published was 2019, followed by 2020, 2021 and 2022, respectively, and there was only one study in 2003 and in 2005. In other words, it can be said that the number of theses on related topics has started to increase in recent years.

Table 1. Publication years

Publication Years	Frequency	Publication Years	Frequency
2003	1	2013	5
2004	6	2014	7
2005	1	2015	8
2006	3	2016	12
2007	4	2017	19
2008	3	2018	22
2009	2	2019	38
2010	3	2020	34
2011	3	2021	33
2012	4	2022	28
		TOTAL	236

3.4.2. Distribution of theses written from a work psychological perspective in the aviation sector by universities

As can be seen in the table 2, when the distribution of theses written with from a perspective of work psychology in the aviation sector is examined according to the universities at which they are published, it can be seen that they are mostly written at Beykent University, followed by Anadolu University, Gelişim University, Arel University, Istanbul University, Turkish Aeronautical Association University, Aydın University, and Kocaeli University.

Table 2. Universities

Universities	Frequency	Universities	Frequency
Beykent University	25	Ondokuz Mayıs University	2
Anadolu University	21	Sabahattin Zaim University	2
Gelişim University	13	Selçuk University	2
Arel University	12	Ufuk University	2
İstanbul University	12	Nişantaşı University	2
Turkish Aeronautical Association University	12	Yıldız Technical University	2
Aydın University	10	Ankara University	1
Kocaeli University	10	Bartın University	1
Eskişehir Technical University	7	Bilim University	1
Gazi University	7	Çağ University	1
Marmara University	7	Çankaya University	1
Bahçeşehir University	6	Dicle University	1
İnönü University	6	Gedik University	1
Middle East Technical University	6	Haliç University	1
Dumlupınar University	4	İzmir Kâtip Çelebi University	1
Maltepe University	4	Kadir Has University	1
Akdeniz University	3	National Defence University	1
Gebze Technical University	3	Kırklareli University	1
İbn Haldun University	3	Niğde University	1
Işık University	3	Çanakkale Onsekiz Mart University	1
İstanbul Technical University	3	Pamukkale University	1
İstanbul Ticaret University	3	Rumeli University	1
Sakarya University	3	Süleyman Demirel University	1
Ankara Yıldırım Beyazıt University	2	Uşak University	1
Atılım University	2	Mersin University	1
Manisa Celal Bayar University	2	Medipol University	1
Hacettepe University	2	Üsküdar University	1
Hatay Mustafa Kemal University	2	Erciyes University	1
Muğla Sıtkı Koçman University	3	Health Sciences University	1
Yeditepe University	3	TOTAL	236
Okan University	2		

3.4.3. Distribution of theses written from a work psychological perspective in the aviation sector according to the institutions where they were published

Table 3. Institutions

Institutions	Frequency
Institute of Social Sciences	162
Institute of Graduate Studies	46
The Graduate School of Natural and Applied Sciences	19
Graduate School of Health Sciences	3
Defense Institute of Health Sciences	2
Institute of Educational Sciences	2
Graduate School of Informatics	1
Institute for Defence Sciences	1
TOTAL	236

When the distribution of the theses written from the perspective of occupational psychology in the aviation sector in the National Thesis Center between 2003 and 2023 is

examined according to the institutes at which they are published, it is seen that the institute with the most studies is the Institute of Social Sciences, followed by the Institute of Graduate Studies, and then by the Graduate School of Natural and Applied Sciences. The least the institutes with the fewest studies are the Graduate School of Informatics and the Institute of Defense Sciences, with one study each.

3.4.4. Distribution of theses written from a work psychological perspective in the aviation sector according to the departments in which they are published

When the distribution of the theses written from the perspective of work psychology in the aviation sector in the National Thesis Center between 2003 and 2023 is examined according to the departments in which they are published, it is seen that the most work is in the business department, followed by the civil aviation management, the business management, the aviation management, the psychology, the labor economics and industrial relations departments, respectively.

Table 4. Departments

Departments	Frequency	Departments	Frequency
Business	102	Electrical and Electronics Engineering	1
Civil Aviation Management	19	Maritime Transportation Engineering	1
Business Administration	15	Cognitive Science	1
Aviation Management	12	Industrial Design	1
Psychology	11	Educational Sciences	1
Labour Economics and Industrial Relations	10	Education Management and Supervision	1
Human Resources Management	7	Motion and Training Sciences	1
Air Traffic Control	5	Physical Education and Sports	1
Industrial Engineering	4	Economics	1
Environmental and Technical Research of Accidents	4	Business (English)	1
Air Transport Management	3	Public Relations and Publicity Department	1
Pilotage	3	Marketing	1
Communication	3	Sociology	1
International Trade and Logistics	3	Psychological Counseling and Guidance	1
Computer Engineering	2	Family Counseling and Education	1
Aerospace Engineering	2	Recreation	1
Human Resources and Organizational Change	2	Defense Management	1
Public Relations	2	Science of Strategy	1
Occupational Health and Safety	2	Transportation and Logistics	1
Tourism Management	2	International Business	1
Nutrition and Dietetics	1	International Quality Management	1
Computer Education and Instructional Technology	1	TOTAL	236

3.4.5. Distribution of theses written from a work psychological perspective in the aviation sector by higher education level

As can be seen in the table 5, when the distribution of theses written from the perspective of work psychology in the aviation sector in the National Thesis Center between 2003 and 2023 is examined according to the level of higher education, it has been determined that 188 master's theses, 46 doctoral theses and 2 specialization in medicine theses have been written.

Table 5. Level of Education

Degree of education	Frequency
M.A.	188
PhD	46
Thesis in Medicine	2

3.4.6. Distribution of theses written from a work psychological perspective in the aviation sector according to the sample group examined

Table 6. Sample Group

Sample Group	Frequency
Employees in the aviation sector	76
Pilots - Army aviation pilots (air forces command fighter pilots -land forces command)	44
Air traffic controller	19
Airline cabin crew	18
Airlines flight crew	17
Ground services workers	16
Flight and maintenance technicians/ Technical personnel in the aviation sector / Technicians working in commercial aircraft maintenance jobs	9
Theoretical studies and studies with model proposals	9
Employees at the management level of airline companies	7
Associate, undergraduate and graduate students in aviation departments	5
Employees operating in the sportive aviation sectors	4
Flight training students and instructor pilots	3
Company officers serving the aviation sector	3
Civil aviation general directorate employees	2
Customers in the civil aviation sector	2
Flight dispatcher	1
Flight training organizations operating in the civil aviation sector	1
TOTAL	236

When the theses were evaluated in terms of sample group, it was difficult to distinguish the target group and to obtain certain numbers, as some of the studies were more general, while others were quite specific in this regard. According to results, it has been determined that employees working in the aviation sector, civil and military pilots, air traffic controllers, airline cabin crew, airline flight crew and aviation ground services workers were selected as sample groups.

3.4.7. Distribution of theses written from a work psychological perspective in the aviation sector by research type

When the table is examined to determine the research type of theses, it is seen that out of 236 theses, 203 are quantitative research, 17 are qualitative research, 8 are mixed research comprising of both qualitative and quantitative research, and the remaining 8 are theoretical research. In this case, it is seen that between the years 2003 and 2023, the quantitative research type was utilized, and mostly through the use of questionnaires as data collection tool, followed by the

qualitative research type utilizing interviews, and then the mixed research type, which includes both types of research at the minimum level. In the field of aviation, which is more suitable for field work, it can be seen that theoretical studies are clearly in the minority.

Table 7. Research Type

Research Type	Frequency
Quantitative	203
Qualitative	17
Mixed research	8
Theoretical	8
TOTAL	236

3.4.8. Distribution of theses written from a work psychological perspective in the aviation sector according to the research subjects

3.4.8.1. M.A. Theses

Table 8. Subjects (Master of Theses)

Subjects (Master of Theses)	Frequency	Subjects (Master of Theses)	Frequency
Organizational commitment-occupational commitment-loyalty	26	Experience	2
Stress	18	Mental workload	2
Burnout	16	Risk taking levels-risk management	2
Communication-Communication skills- Communication problems	9	Positive organizational behavior	2
Safety management in aviation - Flight safety - Unsafe behavior	9	Organizational support	2
Emotional intelligence	7	Organizational attractiveness	2
Anxiety	6	Professional adaptation	2
Motivation	6	Person-organization fit	2
SCL90 (somatization, depression, interpersonal sensitivity, phobic anxiety) hopelessness	4	Spare time-perception of boredom	1
Decision-making	4	Time management	1
Life satisfaction	4	Problem solving	1
Worklife balance	4	Digital Literacy	1
Fatigue / Fatigue risk management	4	Self-Assertion	1
Organizational justice	4	Alertness	1
Turnover intention	4	Psychological Ownership	1
Self-efficacy	3	Caution	1
Happiness-wellbeing	3	Over workload	1
Recruitment	3	Psychosocial risk factors	1
Work engagement	3	Pilots'soft skills	1
Organizational citizenship	3	Air traffic management	1
Organizational silence	3	Corporate risk management	1
Organizational culture-Organizational climate	3	Interaction between Human and Machine	1
Psychological harassment	3	Machine learning techniques	1
Shift – normal work	3	Occupational competence	1
Working conditions and rights	3	Management support	1
Personality traits / Temperament characteristics	2	Job crafting	1
Ego analysis	2	Intrapreneurship	1
Perception of crisis management	2	Psychological contract	1
Psychological capital	2	Perception of job insecurity	1
Situational awareness	2	Intention to stay	1

Between the years 2003 and 2023, the master's theses in the field of aviation from the perspective of work psychology

were examined in terms of the subjects covered at the National Thesis Center. According to the analysis result, it was

determined that the most studied topics were organizational commitment, stress, burnout, communication, safety-security, emotional intelligence, anxiety, motivation and so on.

3.4.8.2. PhD Theses

Between the years 2003 and 2023, the doctoral theses in the field of aviation from the perspective of work psychology were examined in terms of the subjects covered at the National

Thesis Center. According to analysis results; it was determined that the most studied topics include: performance, organizational commitment, personality, manager-leadership styles, competence, culture, job satisfaction, intention to leave and so on.

Table 9. Subjects (PhD of Theses)

Subjects (Philosophy of Doctorate)	Frequency	Subjects (Philosophy of Doctorate)	Frequency
Performance	10	Nomophobia	1
Personality	7	Political skills	1
Organizational commitment	7	Organizational learning ability	1
Intellectual competence – competence	6	Innovative behavior	1
Management style-leadership	6	Risk perception	1
Organizational culture – culture	5	Technostress	1
Job satisfaction	4	Perception of job insecurity	1
Intention to leave	4	Psychological empowerment	1
Agility	3	Positive psychological capital	1
Motivation	3	Job control	1
Decision-making	3	Employees' conformity to the organizational rules	1
Communication	3	Work engagement	1
Emotional intelligence	2	Burnout	1
Managerial support	2	Workplace relationships quality	1
Organizational justice	2	Organizational socialization	1
Organizational trust	2	Emotional labour	1
Organizational citizenship	2	Job demands	1
Innovation strategies-innovative organizational climate	2	Psychological contract	1
Working conditions	2	Intrapreneurship	1
Gender	1		

3.4.8.3. Theses in Medicine

When the specialization theses in medicine are examined, the topics identified include: human limit, education and performance subjects.

Table 10. Subjects (Dissertation in Medicine)

Dissertation in Medicine	Frequency
Performance	1
Human Limit	1
Education	1

4. Discussions and Conclusion

Since the 1980s, globalization has increased, and with it there has been an increase in trade at the international level, development in the field of tourism, as well as a revival of the economy and advancements in technology, all of which have contributed to the development of the transportation sector quantitatively and qualitatively. Also, flying is often preferred because it is faster, more comfortable and more reliable relative to other forms of transportation. Along with these developments, more personnel were required as the number of passengers and trips increased. At the same time, employed

personnel should be employees who have the technical knowledge to use the developing technology, possess excellent communication skills and be able to work efficiently by adapting to the organization because when the recent studies are examined, it is observed that plane crashes are generally caused by human errors rather than technical problems.

As a matter of fact, while it was seen that technical issues were mostly studied in the first studies in the field of aviation, psychology-based scientific studies became important with the increase in human errors. In this context, work psychology, which is a discipline that examines the attitudes and behaviors of employees in business life, investigates the causes and tries to find solutions to problems, comes to the fore. For this purpose, the theses written on the aviation sector were examined from the perspective of work psychology in this study. In order to determine the theses written in this field, a comprehensive search of the keywords "aviation", "flight", "cockpit", "pilot", "cabin crew", "air traffic" and "aviation safety" was made in the National Thesis Center of the Council of Higher Education for the years between 2003 and 2023 (inclusive). One thousand two hundred fifty (1250) theses accepted for publication were located in this search. When the field of aviation was examined from many different perspectives among these theses, it was determined that there were 246 theses related to work psychology were in line with

the purpose of the research. However, when the concepts of "aviation", "cockpit", "pilot", "flight", "aviation safety" were scanned, it was determined that 8 theses were similar, so some theses were eliminated. Therefore, this study encompassed 236 theses. They were classified according to the year of publication; the universities, institutes, departments at/in which they were published; the level of higher education at which they were written; the topics in work psychology on which they were written; the sample groups which were studied, and research type.

According to the publication years of the theses, it was seen that the most studies were published in 2019, then in 2020, 2021 and 2022, respectively. In other words, it has been seen that the number of theses on related work psychology has begun to increase in recent years. One possible reason for this may be that while technical problems decrease with the development of technology, human errors come to the fore and the number of human-oriented studies has increased as a result. Secondly, according to the universities at which they are published is examined, it is seen that they are mostly written in Beykent University, Anadolu University, Gelişim University, Arel University, Istanbul University, Turkish Aeronautical University, Aydın University and Kocaeli University. The fact that these universities have programs specifically related to aviation can be shown as the reason for the high number of studies. Thirdly, according to the departments is examined, it is seen that they are mostly studied in the departments of business followed by the departments of civil aviation management, business administration, aviation management, psychology, labor economics and industrial relations, respectively. The fact that business departments are older than civil aviation departments and have organizational behavior discipline has caused this department to come to the fore. Since the subjects are related to the attitudes and behaviors of individuals in work life, the psychology department may be behind in terms of the theses written when compared to other departments. In the department of labor economics and industrial relations, the existence of the disciplines of work psychology and human resources increases the number of relevant studies in these departments. Fourthly, according to the institutions is examined, it is seen that the institute with the most studies is the institute of social sciences because above-mentioned departments are affiliated with this institutions. Fifthly, according to the level of higher education is examined, it has been determined that 188 master's theses, 46 doctoral theses and 2 specialization in medicine theses have been written. It can be said that the reason for the high number of master's theses is that the master's education is more common and relatively short-term, a limited number of people receive doctoral education, and the doctorate program in the field of aviation in Türkiye is limited. Sixthly, when master's and doctoral theses are examined in terms of work psychology; it has been seen that "organizational commitment, stress, burnout, communication, safety management, performance, personality, competence and management style" were the most studied subjects. As life safety is always at the forefront in the transportation sector, "safety management, communication, management style, personality and competence" subjects are very important. Due to difficult working conditions, excessive workload and high levels of responsibility, "stress and burnout" topics are also important. "Organizational commitment" is also necessary for employees to continue working in this sector and "performance" as in every sector are

among the subjects expected to be studied. Seventhly, when the theses were evaluated in terms of sample group, it was difficult to distinguish the target group and to obtain certain numbers, as it the studies were sometimes general and other times quite specific. In general, those working in the aviation sector, civil and military pilots, air traffic controllers, airline cabin workers, airline flight crew and aviation ground services workers were selected as sample groups. Finally, when the type of research was examined, it was determined that most of the theses utilized quantitative research methods. Although quantitative studies are good for collecting more data in the field, more qualitative studies are necessary to gain in-depth knowledge of the field. At the same time, the mixed research type is the most useful research type in terms of outputs quantitatively and qualitatively.

As a result, it was determined that number of studies increased after 2019. Although it was seen that lots of research were conducted in different departments, institutes and universities, more specific departments related with aviation psychology should be opened. Additionally, despite quantitative research type was used in most of the theses, qualitative and mixed research types should be preferred in terms of getting more detailed and in-depth information about aviation sector. Finally, organizational commitment, stress, burnout, performance and personality were very common topics studied so researchers should studied on more original topics. Moreover, as a result of this study, it will be primarily determined how much research has been done on which subject and which occupational groups are selected as the sample group, and at the same time, subjects and occupations that have been studied less or not will be a guide for future studies. Moreover, thanks to these researches, managers in the aviation sector can learn the reasons for the attitudes and behaviors of the employees, how to ensure harmony between work life and employee, and how to improve the well-being of the employee to prevent accidents.

Ethical approval

Not applicable.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

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